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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------|-------------|-------------------------|---------------------|------------------|
| 10/511,576 | 10/13/2004 | Maurice Clifford Hately | KIN 215 | 4518 |
| 7590 | | 10/04/2005 | EXAMINER | |
| Horst M Kasper | | HO, TAN | | |
| 13 Forest Drive | | ART UNIT | | |
| Warren, NJ 07059 | | PAPER NUMBER | | |
| | | 2821 | | |

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/511,576

Applicant(s)

HATELY, MAURICE CLIFFORD

Examiner

Tan Ho

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31 is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


TAN HO
PRIMARY EXAMINER

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>09/08/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

2. Claim 1 is objected to because of the following informalities: In claim 16, line 13, "a toroidal coal" should be changed to --a toroidal coil--, and the last line "o " should be -of--. In claim 18, line 2, "a hollow cone" should be changed to --the hollow cone-- if it is the hollow cone defined in claim 18. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. Claims 16-18, 20 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 16, line 4, claim 17, lines 2 and 6, and the claim 20, line 3, the expression "or" renders the claims alternative.

Claim 16 recites the limitation "the first inductive component" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "the resonant circuit" in lines 10 and 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "the resonant transformer" in lines 12 and 13. There is insufficient antecedent basis for this limitation in the claim.

Claim 17 recites the limitation "the resonator coil" in line 6. There is insufficient antecedent basis for this limitation in the claim. Is it the toroidal coil in claim 16?

Claim 18 recites the limitation "said terminate plane" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the electric field" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 22 recites the limitation "the non-magnetic plane" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 25 recites the limitation "said conductor loops" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Allowable Subject Matter

4. Claims 31 is allowed.
5. Claims 16-30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter:

Claim 16 recites a radio antenna which is physically dimensioned to be less than ten percent of the operating wavelength, the power to be transmitted is connected from a low impedance feeder via an inductive component connected to a low impedance tap on a RF autotransformer which has a capacitive component connected to be parallel resonance, the inductive component is used to stimulate the principal in-phase RF magnetic field and the capacitive component is used to stimulate the principal in-phase RF electric field, and in the resonant circuit the current fed to the resonant transfer directed through parallel part of a toroidal coil.

Claim 31 recites an antenna device comprising two electrical conductive surfaces across which RF field lines each carrying half the power are arranged to cross RF magnetic field lines carrying the remaining half power to feed through a set of coils

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wired in parallel and lying in toroidal shape to create a circular RF magnetic field and passes to a low impedance tap on a resonant autotransformer.

None of the prior arts shows or suggests these antenna devices.

7. The patents to Lindenblad, Stix, Chen et al, Hanawa et al, Acker et al, Psiol, and Roche are cited as of interest showing the device similar to that disclosed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Ho whose telephone number is (571) 272-1822.

The examiner can normally be reached on M-F (8:00AM - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TAN HO
PRIMARY EXAMINER